β TITANIUM COMPOSITIONS AND METHODS OF MANUFACTURE THEREOF

ABSTRACT

A composition comprises about 8 to about 10 wt% molybdenum, about 2.8 to about 6 wt% aluminum, up to about 2 wt% vanadium, up to about 4 wt% niobium, with the balance being titanium, wherein the weight percents are based on the total weight of the alloy composition. A method for making an article comprises cold-working a shape from a composition comprising about 8 to about 10 wt% molybdenum, about 2.8 to about 6 wt% aluminum, up to about 2 wt% vanadium, up to about 4 wt% niobium, with the balance being titanium, wherein the weight percents are based on the total weight of the alloy composition; solution heat treating the shape; and cooling the shape.